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Claim L1239348

Eby Township
NTS - 42 A/1
80°10'W 48°04'N

2.57388

Fall 2016

INDEX

FIGURES

Kirkland Lake Resident Geologists District

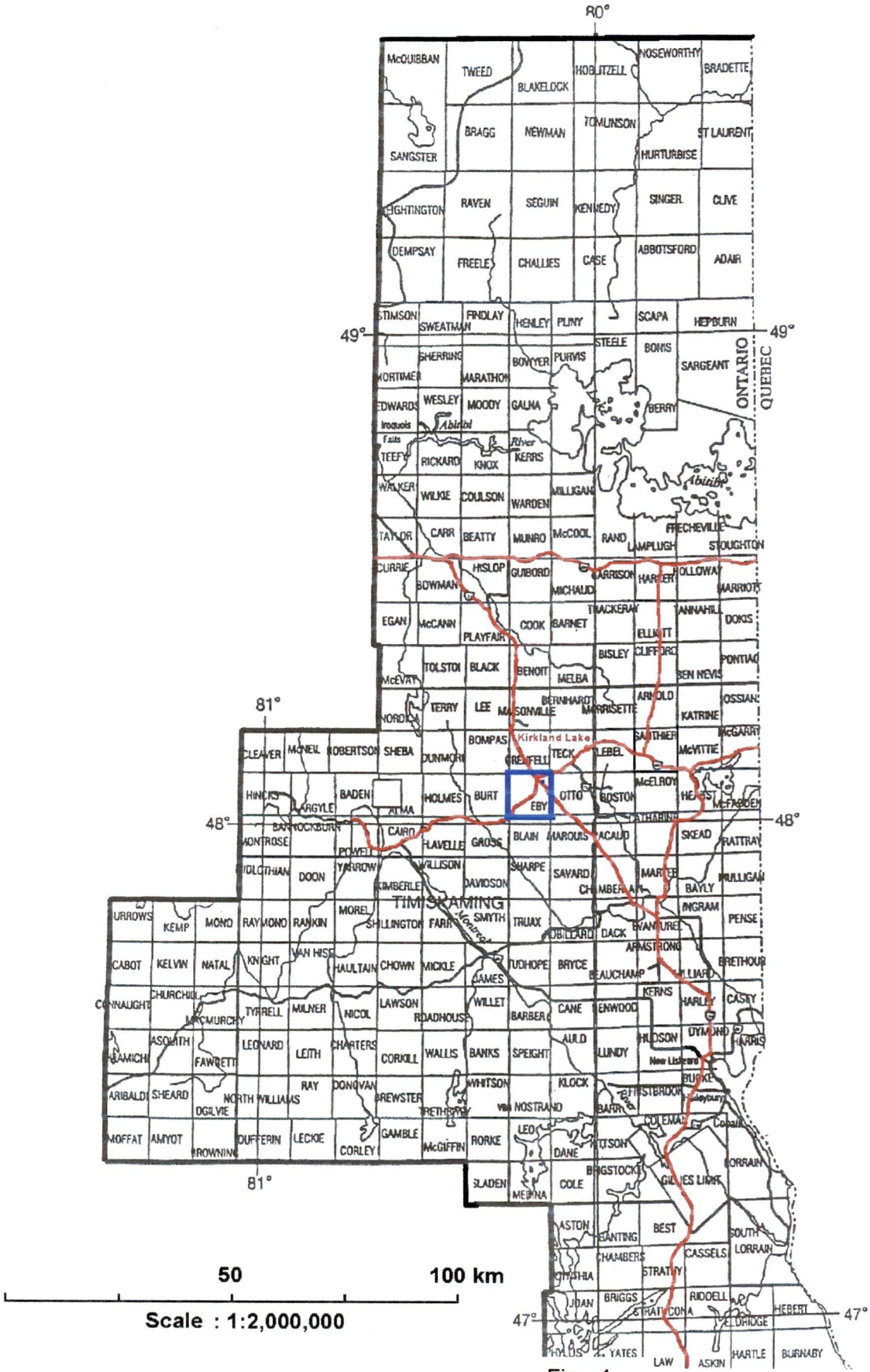


Fig - 1

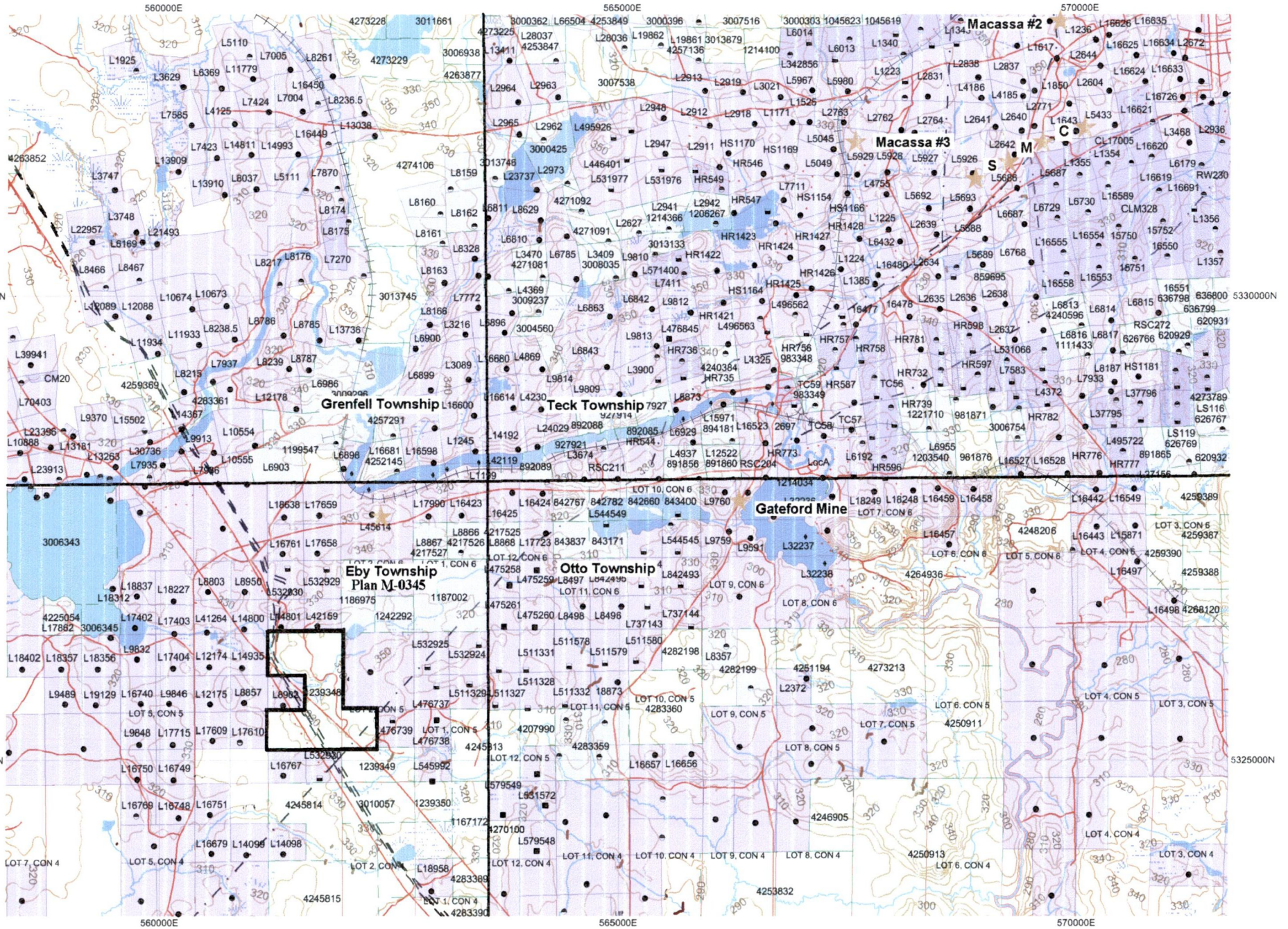


Fig - 2

2

Geo-Claims UTM Zone 17
5000m grid

PROPERTY LOCATION

The claim is located in the Larder Lake mining division approximately 14 kilometers south-west of the town of Kirkland Lake. The group sits midway in the eastern end of Eby Township with Highway 11 passing through the claims. This is in the Kirkland Lake Regional Resident Geologists District and can be found on NTS-42 A/1 with the geographic center of the claim being at approximately 80°10'W and 48°04'N.

ACCESS

Heading south on Hwy.#11 from the intersection of Hwy.#66 and trans-Canada Hwy.#11 at Kenogami for 1.8 kilometers will bring you to the approximate geographic center of the claim. Many hunting trails, transmission lines and a gas pipeline give improved access to much of the claim area.

CLAIMS

This claim is a staked mining claim block totalling 6 claim units in Temiskaming District, in the subdivided Township of Eby, recorded on Plan M-0345.The claims and descriptions are as follows:

CL#1239348--Lot 3, Con.5 N1/2(noSW1/4) +Lot 3 Con.5 N1/2 of S1/2
+Lot 2, Con.5 NW1/4 of S1/2 - 6 units

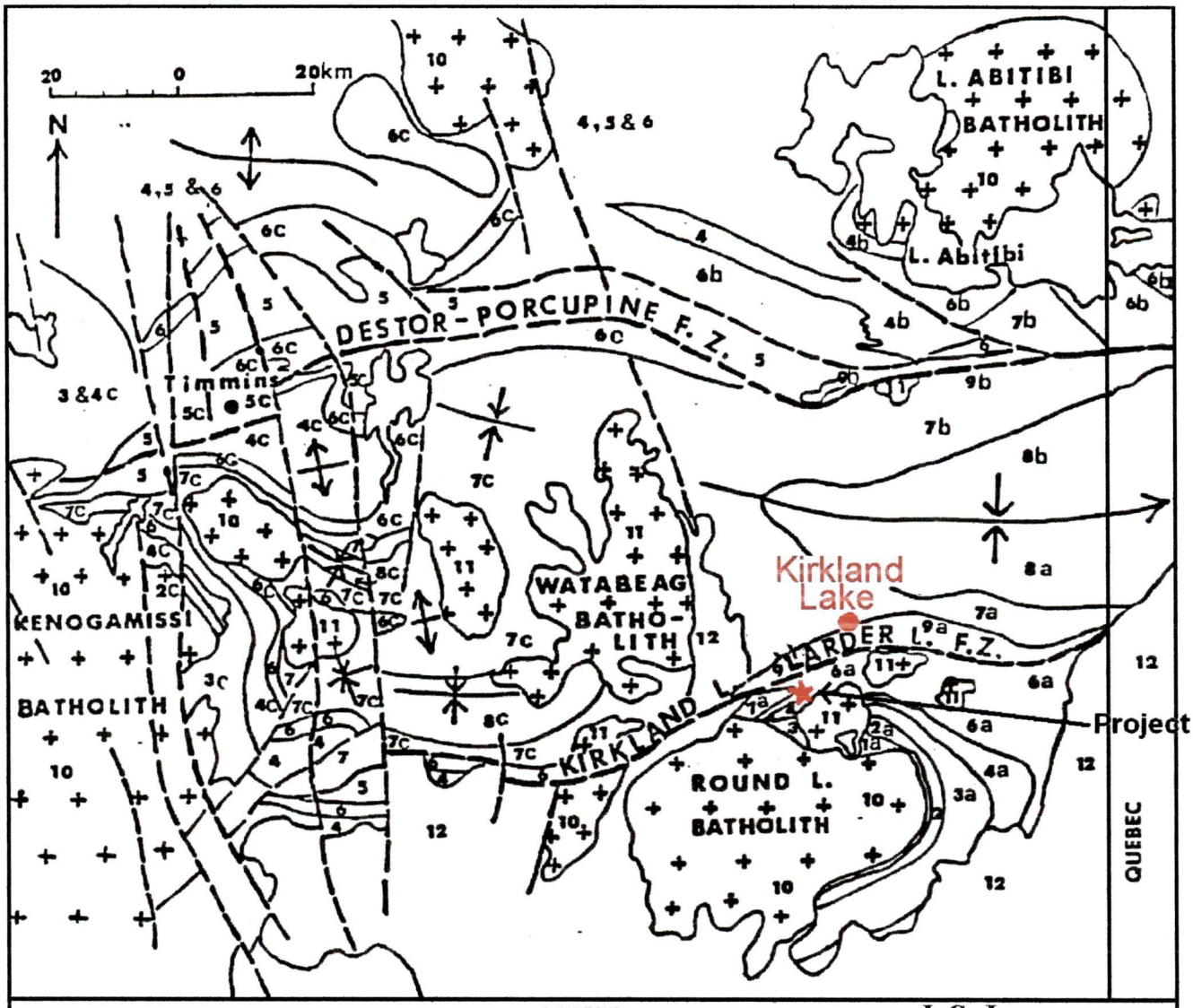
GENERAL GEOLOGY

This claim lays within the Abitibi Greenstone Belt, a region of predominantly volcanic rocks and related interflow sediments at the south central region of the Superior Province.Several eras of intrusion and deformation have affected most of the lithologies present. Major structural deformation zones,(locally the Larder-Cadillac Deformation Zone or LCDZ), parallel each other west to east across the belt and have acted as a control on gold deposition. The Abitibi Belt is host to many large gold and base metal deposits on both sides of the Ontario-Quebec border along these structural trends and has an exploration history going back well into the 1800's. A band of altered mainly fluvial sediments of Temiskaming age, folded and upturned to a near vertical position, coincide with the main structural trend of the LCDZ less than 1200 meters to the north of the claim group. This claim lays amongst the splay faulys of LCDZ. The round Lake batholith, a large Archaen aged granitic intrusive occurs about 6 kilometers to the south-west. The south east of the claim group is the "Otto Stock", an almost circular, somewhat zoned mafic (sanukitoid?) intrusive of some 10 kilometer diameter.Thin bands of clastic sediments and iron formation belonging to the older Skead group trend east-west through the map area and wrap around the Otto Stock.To the south-west of the claim group, a roughly 10 kilometer wide north-south finger of Huronian aged sediments filling a paleo depression of probable structural origin overlie the volcanics. Field work by the OGS has shown LCDZ strain and faulting affecting these much younger overlying sediments.

The Temiskaming Rift is a regional graben feature strinking at about 330° across this part of Ontario.This young rift system has a definite control association with diamond bearing intrusives such as kimberlites. Several NNW-SSE trending fault features passing through the area have been identified as probable Temiskaming Rift associated features.

The Kirkland Lake Break is located about 7500 meters north east of this claim., laying on the east side of the Amikougami Fault, a late off-setting cross fault. The Macassa Mine, the last operating producer of the historic Kirkland Lake camp which has produced in excess of 28 million ounces of gold, has its #3 shaft at this area. Although there have been several postulated correlations of the economic
faults to fault or vein features to the west of this north south fault, no economically encouraging "ore blocks" have been defined to the west of the Amikougami Fault. Available geologic reports and publications appear to have differing information and estimation of the amout of and direction of off-set by the Amikougami Fault. The east-north east trending Kirkland Lake Break is mapped as merging with the Larder Cadillac break about 1400 meters directly north of L1239348.

General Geology of the Kirkland Lake Area



LEGEND L.S. Jensen

Proterozoic

Keeweenawan diabase (not shown)

12 Cobalt Group

Archean

Matachewan diabase (not shown)

Granitic rocks

11 Granodiorite, monzonite, quartz monzonite, syenite

10 Massive to gneissic quartz diorite, tonalite, trondhjemite

Upper Supergroup

9 9a* Timiskaming Group, 9b** Destor-Porcupine Complex

8 8a, 8n, Blake River Group, 8c*** Blake River (Upper Fm., Tisdale Group)

7 7a, 7b, Kinojevis Group, 7c Kinojevis Group, (Middle Fm., Tisdale Group)

6 6a Larder Lake Group, 6b Stoughton Roquemaure Group, 6c Lower Fm., Tisdale Group

5 5c Porcupine Group

Lower Supergroups

4 4a Skead Group, 4b Hunter Mine Group, 4c Upper Fm., Deloro Group

3 3a Catherine Group, 3c Middle Fm. Deloro Group

2 2a Wabewewa Group, 2c Lower Fm. Deloro Group

1 1a Pacaud tuffs****

*a refers to Kirkland Lake Area, south limb of synclinorium (Jensen 1978c, 1979).
**b refers to Kirkland Lake Area, north limb of synclinorium (Jensen 1976, 1978b).
***c refers to Timmins Area (Pyke, 1980).
**** (Goodwin, 1965).

Fig - 3

CLAIM / LOCAL GEOLOGY

O.D.M. Map M-2239 of Eby Twp. shows the northern three claim units to be underlain by mafic intrusive rocks of gabbroic to dioritic composition. The southern three claims are mapped as mafic volcanic basalt/andesite agglomerate-tuff. An exposure of syenitic rock occurs in the south part of the claim mapped west of Hwy 11. Due east of the mapped exposure, a variably hematized mafic syenitic rock can be observed in the rock cut on the east side of the highway which is likely the same dike.

In the rock cut on the west side of Hwy 11 at a location approximately 450 meters south of the natutal gas pipeline, road upgrading in the last decade exposed a quartz carbonate vein from 10 to 20 cm wide with disseminated sulphides and flecks of fuchite, trending parallel to the highway. Limited work by various parties including the author have yielded up to 400 ppb gold from vein and altered pyritic wallrock. Most of this vein exposure occurs on a patented claim across the the road allowance that was opened up during blasting performed by road widening operations in about 1998. No recorded work for this vein area by the owners of the claim exists. No known drilling has occured on this structure.

Several occurances of gold are located in the immediate area around the claim.Most notably of the gold occurances in the area is the workings of the Gateford Mine about 5 kilometers east north east of this claim, on the west shore of Otto Lake. These holdings include the workings of the Swastika Mine which is the site of the first discovery west of Larder Lake in 1906, three years before the major discoveries 4½ north east in what was to become the historic Kirkland Lake gold camp. The property is underlain by volcanic rock cut by syenite dikes. Gold occurs in very rich thin flat laying quartz veins associated with galena and molybedenite. Initial production at the Swastika Mine began in 1911 and was sporadic unill about 1950. About 1 million dollars of gold from about 100,000 tons of ore were produced from the combined Gateford holdings.

In 1911 gold was discovered on the "Baldwin" property 1300 meters north of the claim. The property was developed with a shaft to 400 feet, 920 feet of crosscutting, and 1120 feet of drifting. Fine grained native gold associated with molybedenite and chalcopyrite occurs in several east-west oriented quartz stringers within a carbonate schist. Shoots also occur in red syenite porphyry dykes and light pink fine grain syenite. The shaft and workings are in the Temiskaming aged sediments.

In 1939 gold was discovered 1100 meters north -west of this claim on the Rogick-Elliott-Clark claims. Extensive trenching and drilling showed gold values up to about ½ ounce per ton in gold bearing zones up to 20 feet wide, associated with sheared contacts of red syenitic dykes and carbonate rock. In the late 60's early 70's much of the surface exposures have been removed by open cutting. No report of recovered gold was disclosed.

In around 1944, Sylvanite Mines reported gold values across 2 to 4 feet in a quartz veined zone in schist. about 1 kilometer south of this claim. No follow up work reported.

In 1944, the "Lumsden" shaft was sunk on a red porophyry dike about 650 meters west ot the claim line of the the south west boundary of this claim. A pinkish quartz vein at the botton of the shaft assayed about .17 ounces per to across five feet. No reported follow up drilling or work. This is probably represents the west continuation of the Todora geology described next. This would indicate about 1.2 kilometers of this zone would be present across claim L1239348.

In around 1948, drilling about 600 meters east of the south east end of the claim, on the "Todora" claims encountered molybedenite and chalcopyrite with gold in quartz stringers and quartz porphyry in sheared volcanic rocks and iron formation. About 800 meters farther east the 112 foot "Cheltonia" shaft was sunk south of the zone but crosscutting did not go far enough to encounter the shearing. Grab samples from pits in the shaft area reported up to 13% copper.

From about 1988 to present work by Allsopp and Huston in the Todora and Cheltonia area, overburden stripping exposed a chalcopyrite vein system up to 1 m wide. At the southern contact of this vein system, chalcopyrite is locally concentrated in a band up to 10 cm wide that grades up to 12.13% Cu. The mineralized zone strikes 060°, has a near vertical dip and is hosted within carbonatized mafic volcanic rock that is exposed over a 25 m width. Chalcopyrite is also exposed in another overburden-stripped area to the east. A syenite intrusion is exposed at the northern side of both stripped areas. Drilling of several holes has had limited success in gold values but has established an extensive fault related alteration system. The potential that may exist along strike

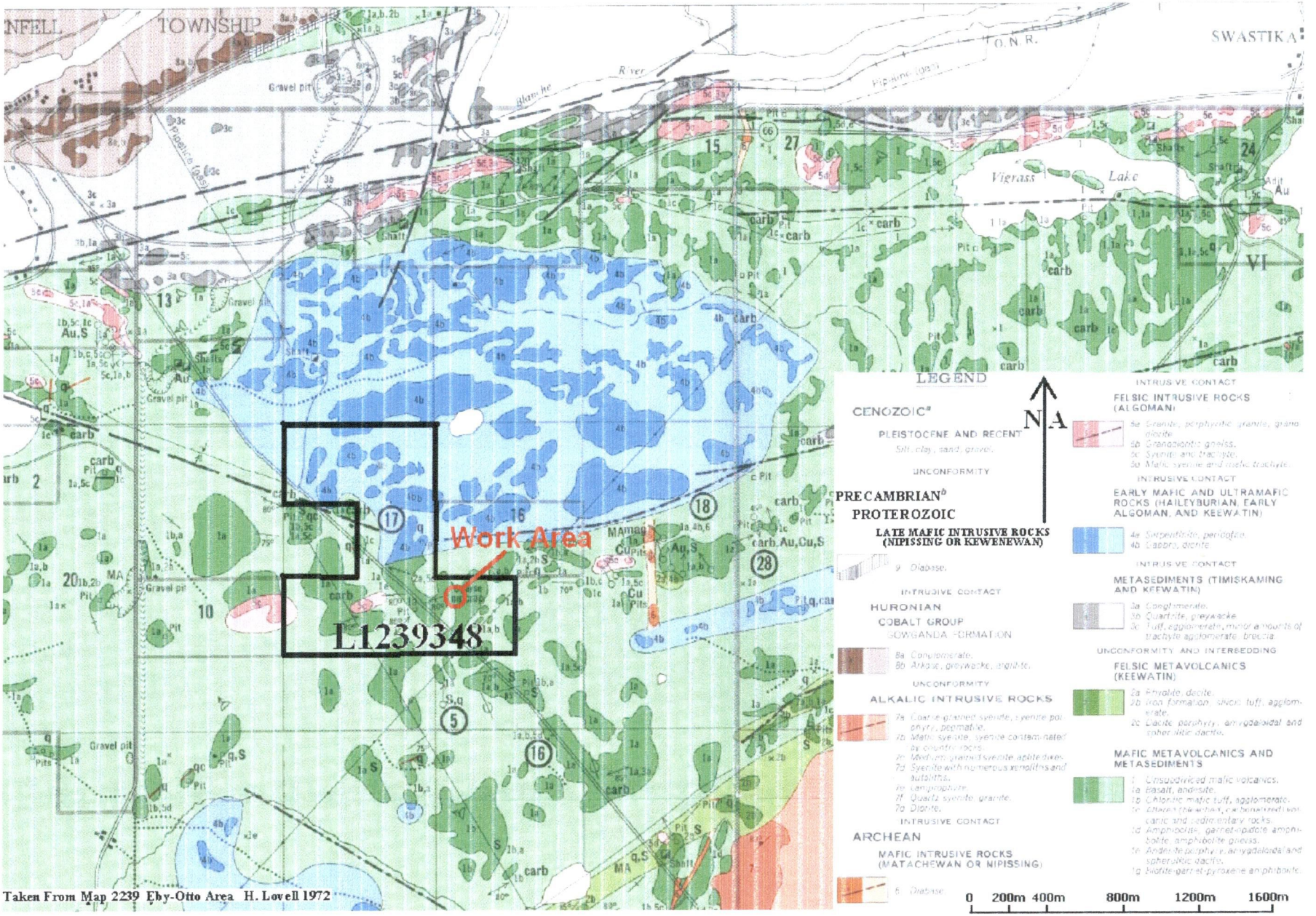

TOWNSHIP
SWASTIKA
T.O.N.R.
Vigrass Lake
Work Area
L1239348
Taken From Map 2239 Eby-Otto Area H. Lovell 1972
LEGEND
CENOZOIC
PLEISTOCENE AND RECENT
Silt, clay, sand, gravel.
UNCONFORMITY
PRECAMBRIAN
PROTEROZOIC
LATE MAFIC INTRUSIVE ROCKS (NIPISSING OR KEWENEWAN)
9 Diabase.
INTRUSIVE CONTACT
HURONIAN
COBALT GROUP
SOWGANDA FORMATION
8a Conglomerate.
8b Arkose, greywacke, argillite.
UNCONFORMITY
ALKALIC INTRUSIVE ROCKS
7a Coarse grained syenite, syenite por-phyry, pegmatite.
7b Mafic syenite, syenite contaminated by country rocks.
7c Medium grained syenite, aplite dikes.
7d Syenite with numerous xenoliths and autoliths.
7e Lamprophyre.
7f Quartz syenite, granite.
7g Diorite.
INTRUSIVE CONTACT
ARCHEAN
MAFIC INTRUSIVE ROCKS (MATACHEWAN OR NIPISSING)
6 Diabase.
INTRUSIVE CONTACT
FELSIC INTRUSIVE ROCKS (ALGOMAN)
5a Granite, porphyritic granite, grano-diorite.
5b Granodioritic gneiss.
5c Syenite and trachyte.
5d Mafic syenite and mafic trachyte.
INTRUSIVE CONTACT
EARLY MAFIC AND ULTRAMAFIC ROCKS (HAILEYBURIAN, EARLY ALGOMAN, AND KEEWATIN)
4a Serpentinite, pericotite.
4b Gabbro, diorite.
INTRUSIVE CONTACT
METASEDIMENTS (TIMISKAMING AND KEEWATIN)
3a Conglomerate.
3b Quartzite, greywacke.
3c Tuff, agglomerate, minor amounts of trachyte agglomerate, breccia.
UNCONFORMITY AND INTERBEDDING
FELSIC METAVOLCANICS (KEEWATIN)
2a Rhyolite, dacite.
2b Iron formation, chert, tuff, agglom-erate.
2c Dacite porphyry, amygdaloidal and spherulitic dacite.
MAFIC METAVOLCANICS AND METASEDIMENTS
1 Undifferentiated mafic volcanics.
1a Basalt, andesite.
1b Chlorite mafic tuff, agglomerate.
1c Altered equivalent of felsic volcanic and clastic sedimentary rocks.
1d Amphibolite, garnet-epidote amphi-bolite, amphibolite gneiss.
1e Andesite porphyry, amygdaloidal and spherulitic dacite.
1g Biotite-garnet-pyroxene amphibolite.
N
A
0 200m 400m 800m 1200m 1600m

Fig - 4

and at depth of a major alteration zone with associated IP anomalies along the Eby–Otto fault, both on the property and to the west of it on. This fault zone is located 1.5 km south of the Cadillac–Larder Lake deformation zone. Sharpley (1999) describes the mineralization and alteration on the Allsopp property as follows:

> *"A major zone consisting of iron carbonate, silicification and pyritization occurs over a strike length of 1000 m and a width of 200 m on the Allsopp-Huston Property along the Eby-Otto fault, which is a subsidiary of the Cadillac-Larder Lake Break within the Larder Lake Group of tholeiitic volcanics. A zone of silicified breccia occurs within the envelop of alteration with disseminated pyrite over a strike length of 600 m and over a width of 50 m. Geochemically anomalous values occur in and around the alteration zone ranging up to 1851 ppb (Au). Moderate to strong induced polarization (chargeability) anomalies occur within the alteration zone over a strike length of 800 m and a width of 100 m."*

In 2005, the Resident Geologist staff visited the area of the Cheltonia shaft now held by and referred to as the Allsopp property. "*Silicified, carbonatized and chloritized rock, probably altered mafic volcanic rock, occurs on the access road to the overburden stripped areas at NAD83 Zone 17 562856E / 5325623N. The rock has undergone micro-fracturing with specularite? fracture filling and contains up to 15% pyrite. This rock unit is perhaps similar to the silicified breccia described by Sharpley (1999). A similar rock also occurs, probably on strike, 1.45 km to the west-northwest in an outcrop on the western side of Hwy 11 at approximately NAD83 Zone 17 561455E / 5325782N. If the mineralized and hydrothermally altered sites are part of a continuous zone then the strike length could exceed more than 2.0 km. Although the gold content associated with this large mineralized alteration zone is generally low, sporadic gold values ranging up to 1851 ppb make it a very attractive target for further exploration. A number of gold deposits in the Kirkland Lake Resident Geologist District such as the Lightning Zone at the Holloway Mine, "flow ore" at the Kerr Mine and the "D" zone at the Cheminis Mine do not come to surface. In the plane and above these orebodies/deposits there is ample evidence at surface for their existence in the form of carbonatization, silicification, pyrite mineralization and minor, sporadic gold mineralization. The best potential for mineralization along this alteration zone should be determined by an IP survey measuring to a depth of 400 m as suggested by Sharpley (1999). Deep drilling should then follow up on the most favourable IP defined targets to ultimately test to a depth of 400 m below surface and possibly beyond*". (Meyer et el 2005 ref: Appendix A & B)

In the summer and fall of 2015, work was again performed on the Allsopp group leases and staked claims on to the east of L1239348. Magnetometer and induced polarization surveys were done on about 11 kilometers of n -s grid. Several generally north east to north west trending anomolies were interpreted, some likely by graphitic sediments known to exist on the survey area. Follow up drilling of two ~600 meter holes was performed about 2000 meters east on strike from L1239348. The drill holes were drilled steeply on a northern azimuth implying southern dips to expected features. No formal drill logs or assay reports have been released, however, in a regulatory filing (FORM 8-K Filed 09/07/16 for the Period Ending 07/11/16 at page 3, Item 8.01 – Other Events), the exploration company performing the work stated :

> *"On July 11, 2016, the Company engaged Frank Ploeger of (a local contractor) as a consulting geologist to analyze core samples obtained from drilling projects conducted by the Company. Mr. Ploeger wrote two reports regarding the contents of three mining properties owned by the Company, located in Kirkland Lake, Ontario. The reports indicate that it is probable that these properties contain a significant concentration of high grade gold, and recommend further exploration to map out areas with the highest likelihood of gold concentration."*
> *(http://www.otcmarkets.com/edgar/GetFilingPdf?FilingID=11582555)*

In a subsequent report prepared and released by F.R. Ploeger on August 22 2016 summarizing the geological and mining context of the Allsopp property, Ploeger states that :

> *"Previous mapping and the current drilling program have identified that a major alteration zone consisting of silicification and weak albitization accompanied by pyrite, occurs over a strike length of 1,000m and a width of 200m along the Eby-Otto fault which is a subsidiary of the Larder Lake Break. This style of alteration is similar to that of the Upper Canada mine. Also, green carbonate, a style of alteration (fuchsitic) present in the Kerr Addison and McBean mines, was noted in some logs. The presence of mineralized*

graphitic and cherty interflow horizons within the mafic volcanic flow package is interesting because it suggests proximity to an Archean exhalative basinal environment that may potentially host VMS (volcanogenic massive sulphide) style mineralization."

The proposed probability that the adjacent properties contain a significant concentration of high grade gold, together with the style of alteration being similar to that of the Upper Canada mine, Kerr Addison and McBean mines does enhance the potential of the area.

PREVIOUS WORK

In 1919 Eby Township was included in mapping by H. C. Cooke of the Geological Survey of Canada while mapping the Kenogami, Round, and Larder Lakes areas.

In 1935, W. S. Dyer of the Ontario Department of Mines mapped Eby Township as part of the Geology and ore deposits of the Matachewan-Kenogami area.

In 1967 Eby Township was mapped by H. L. Lovell of the Ontario Department of Mines. The report and colored geology map M-2239(1inch to ½ mile) was released in 1972 as Geological Report 99.

Undoubtably the area was looked at by many prospectors in the early part of the 1900's as the Swastika Camp and then the Kirkland Lake Camp were being opened up and gold discoveries were drawing many to the area. As for submitted assessment work on file for the area, several work programs have been conducted on various parts of the claim area over the last half century century.

In 1966, Taylor Gold Mines conducted wide spaced ground magnetometer surveys on concession 5, lot 3, NE¼ and SE¼ of the N½ and the NE¼ and NW¼ of the S½. A high anomaly striking east to N45E was outlined across the two southern claims. The work was conducted during the winter and the area was not prospected. According to the company report, the anomaly was presumed to be due to magnetite rich sections within the mafic flows, or possibly lean iron formation. No follow up work after break up was reported.(ref : KL 2626)

In 1987, Mary Ellen Resources performed a VLF and magnetometer survey on concession 5, lot 3, SE¼ of the N½. Lines at 100 meter spacings and readings were taken at 25 meter stations. Conductors and magnetics showed a trend at about N 70 to 80 E. No follow up on the defined anomalies. (ref : KL 1760)

In 1988, Mary Ellen Res performed a VLF survey on concession 5, lot 3, NE¼ and NW¼ of the N½. Follow up trenching on a defined conducter revealed a north east trending fault intruded by a mafic dike which carried up to 5% pyrite over 2 foot widths. Gold values were reported as negligable. (ref :KL 1760)

In 1988, Butte Canyon Resources held concession 5, lot 3, NE¼ and NW¼ of the S½.as L802124 and L802125 respectively, as part of a larger holding. Butte carried out geological mapping, sampling, geochemical assessment, magnetometer and electromagnetic surveys. The surveys outlined the general east-west trend of the geology. Of note is the results of two samples taken from the highway rock cut on the north eastern part of L802124 . Sample #4928 and #4929 returned values of 387ppb platinum and 390 ppb platinum respectively. Sample #4935 taken about 150 meters SW of the above samples returned 1,500 ppm Cr, 534 ppm Ni and 63 ppb Au. About 90% of the 35 - 45 scattered outcrops mapped on the two claims are pervasively carbonitized or chloritic.No follow up work on these areas has been reported. (ref : KL 309). The two claims lay within a broad east-west alteration corridor associated with the Eby - Otto fault zone described by Meyer et.al.-2005.

In 1994-96, Doug Robinson conducted linecutting, magnetometer, max-min surveys, geological mapping, hand stripping, and sampling on concession 5, lot 3, NE¼ of the S½ and concession 5, lot 2, NW¼ of the S½, as part of a program on a larger claim group. The program defined an east- west zone of widespread carbonate alteration and quartz veining at least 600 meters long by up to 200 meters wide. Reported gold values were low. Numerous drill targets were defined by the program but no drill program was conducted. (ref : KL 3773)

In 1997-1998, Carl Huston performed line cutting, magnetometer survey and sampling on the southern 3 claims of L1239348. Negligible preliminary results were obtained. The work was not submitted as assessment work and the claims were allowed to lapse.

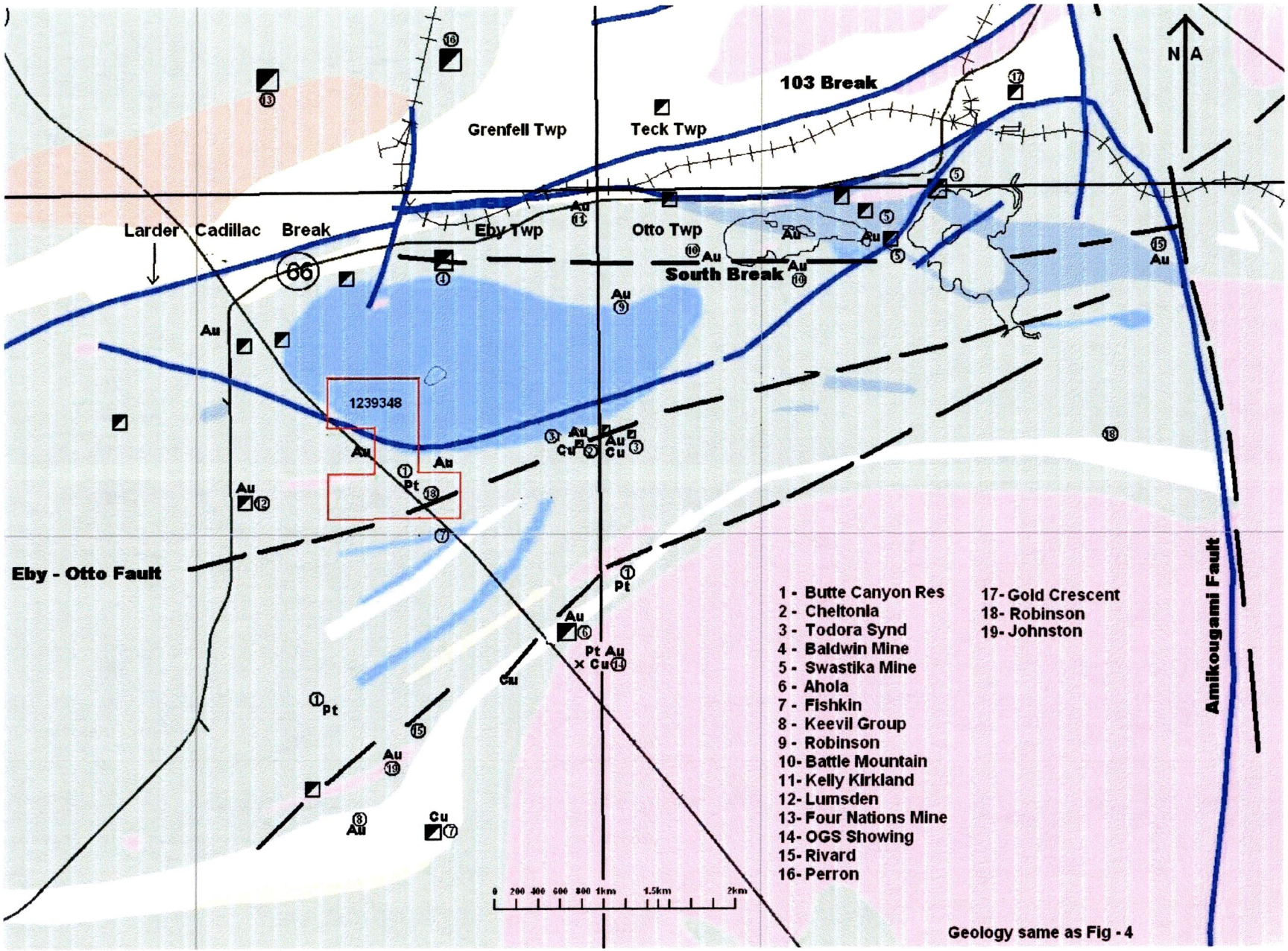

103 Break
Grenfell Twp
Teck Twp
Larder Cadillac Break
Eby Twp
Otto Twp
South Break
66
1239348
Eby - Otto Fault
Amikougami Fault
N
A
1 - Butte Canyon Res
2 - Cheltonia
3 - Todora Synd
4 - Baldwin Mine
5 - Swastika Mine
6 - Ahola
7 - Fishkin
8 - Keevil Group
9 - Robinson
10 - Battle Mountain
11 - Kelly Kirkland
12 - Lumsden
13 - Four Nations Mine
14 - OGS Showing
15 - Rivard
16 - Perron
17 - Gold Crescent
18 - Robinson
19 - Johnston
0 200 400 600 800 1km 1.5km 2km
Geology same as Fig - 4

Fig - 5

In 2001 B. R. Berger, Geologist in the Precambrian Geological Section O.G.S., D. Guindon, District Geologist Kirkland Lake Region O.G.S. and G. Grabowski, District Geologist Kirkland Lake Region O.G.S. reported in Open File Report 6070 (Summary of Field Work and Other Activities 2001, Project Unit 10), that a Geological Reconnaissance along Highway 66, from Matachewan to Swastika had begun. The purpose of this multi-year project is to re-map and improve the geological database. B. R. Berger reports that the Otto Stock, in Otto and Eby townships is characterized by nepheline-bearing syenite, quartz syenite and includes previously unrecognized mafic and ultramafic alkalic gabbro, hornblendite and lamprophyre phases. Berger continues that in the southern part of the map area, calc-alkaline felsic intrusions (gneiss, tonalite, quartz monzonite and granodiorite) are found. The mafic and ultramafic phases of the alkalic intrusions are commonly enriched in platinum group elements (PGE) and the hornblendite, alkalic gabbro and lamprophyre of the Otto Stock are potential host rocks of this type of mineralization. Sample 01-BRB-019 was taken on an occurance of "hornblendite" on the highway 11 rock cut about 1500 meters south of L1239348 and showed values at 169.8 ppb Au, 164.16 ppb Pd, 54.68 ppb Pt and 6830 ppm Cu. In 2002, the claim holders of the OGS sample location took their own samples on each side of Highway 11 at the site of the OGS sampling. Best assays from this follow up program were 0.024 oz/ton Au, 5380 ppm Cu and 219 ppb Pd. A hornblendite rock was noted by the author to occur on the right of way on the west side of hwy 11 at a point about midway north-south on the claim. There the rock is a coarse grained blackish rock composed almost entirely of up to 7mm size hornblende with chlorite being much of the remainder.

Recent re-interpretation(Berger 2001) of some of the mafic flows as well as intrusive phases in the map area as komatiitic in origin. In the publication "Geology and ore genesis in the Abitibi Subprovince, 2008" it is proposed that: *"All of the komatiites in the Abitibi greenstone belt (AGB), regardless of petrogenetic affinity (Al-undepleted, Al-depleted, Ti-enriched), appear to have been undersaturated in sulfide prior to emplacement and therefore capable of forming mineralization. Only the two youngest of the four komatiite-bearing assemblages (2719-2711 Ma Kidd-Munro and 2710-2704 Ma Tisdale) are known to host economic nickel deposits, which are also the only assemblages that contain both abundant magma/lava pathways (magma conduits, feeder sills, lava channels, and channelized sheet flows) and external sources of S. Although most of the komatiites in the AGB have been previously considered to be extrusive, an increasing number of units have been shown to be intrusive and it now appears that komatiite-associated Ni-Cu-(PGE) mineralization in the AGB occurs within a spectrum of environments ranging from intrusive (Dumont, Sothman) through subvolcanic (Dundeal-Dundonald South-Kelex, Galata-McWatters) to extrusive (Alexo, C Zone-Thalweg, Hart-Langmuir-Redstone, Mickel, Marbridge, Texmont). The stratigraphy of some assemblages is now known to be more complex than was previously understood. Thus, komatiite-associated Ni-Cu-(PGE) mineralization is not restricted to specific stratigraphic contacts as previously believed, but may occur in any environment (intrusive, subvolcanic, or volcanic) throughout the stratigraphy where lava pathways have had access to external S".* The long thin band of chemical and clastic sediments which pass east to west through the area and extend about 25 kilometers from beyond the Adams Mine at the east to midway across Eby Twp at the west varies from silicious to sulphide facies, and may have had interaction with the overlying younger flows and would have provided an excellent sulphur source to prime crystalization and precipitation of the sulphide minerals. The prior assay by the OGS and Butte Canyon does appear to indicate that there were at least some pgm's concentrated in the area. The posibility of magmatic sulphide deposits particularly along interaction of the komatiitic rocks with the underlying iron formation of the area is a new target that has not been comprehensively studied.

Since staking in 2002 , the author has prospected, performed some hand stripping and sampled various areas of this claim block. On concession 5, lot 2, NW¼ of the S½ , several X-Ray drill holes were cored in an area of extensive carbonate alteration with attendant quartz veining defined by the previous claim holder. EDH 1-4 encountered altered mafic volcanic rock with carbonate and chlorite alteration. A core sample showing anomolous gold over about 45cm did not connect to the other tightly spaced holes in the fan drilled so the orientation of the feature remains unknown. X-Ray drilling about 100 meters to the east of this area defined a roughly north-north-west trending breccia-quartz about 2 meters average thickness, dipping shallowly to the west at

about 30° to 35°. The zone is visually identical to the gold bearing breccia-quartz zones found on the subsidiary breaks of the main Kirkland Lake mineralized trend. Limited sampling showed scattered elevated values of molybedenum, copper, silver, and lead but gold values did not exceed 50 ppb. The vein/breccia remains open along strike and dip.

In around 2007, two short holes drilled in the south-southwest region of L1239349. Thin quartz carbonate stringers and hematite alteration on surface and in drill holes showed low values of gold. Sludge sampling showed elevated zinc and copper values. In summer 2013 a short drill hole in chloritized mafic volcanic rock was drilled on the north-east area on the NW¼ of the S½ of Lot2, Con5. This hole was stopped when open cave/circulation loss was encountered at 59'.

During the winter of 2010, 6.1 kilometers of grid was cut and a walking magnetometer survey was performed by Douglas Robinson over the north part of L1239348. Interpretation of the survey showed two trends of approximate 060° trend parallels the approximate trend of the LCDZ just to the north of the claim and may be of signifigance as a sub to parallel splay feature. It is interesting in that most of the gold showings in the area are apparently associated with the east-west rather than the 060° trend. Limited follow up work on target areas show little mineralization at surface.

In the summer of 2013 hand stripping was done southeast L1239348 around a north-south trending quartz vein in a variably chloritized and hematized, fine to medium grained, carbonate altered, mafic volcanic breccia? with pale-yellow to beige sericite flakes and wispy stringers. Assays of vein material showed molybdenum, lead and unexplained high chrome assays. At this location several short drill holes were done at the same site. The holes cut a pyritic smoky quartz vein at about 16 feet to 18 feet down hole. Elevated silver, molybdenm, and copper with showing noted in several samples for tellerium, antimony and tungsten. The higher two sludge samples for silver, copper and molybdenum appear to coincide with the previously noted smoky quartz vein. Follow up assaying in 2014 gave 50ppb assays on the quartz vein cores with no explanation for the silver assays obtained in the sludges.

PRESENT WORK

During the fall of 2016 mapping sampling and moss stripping was done on the south west area of the claim to assess for indication of east-west oriented faulting and check for quartz carbonate veining or pyrite mineralization related gold potential. The area is roughly on strike of the structural zone previously commented on by Guindon 1999 and 2005 (see appendix)

The area looked at was clearcut roughly 15 to 18 years ago and was left to natural reforestation. Some poplar and birch has grown, but much of the bush consists of thickets of alder and non merchantable small regrowth which made for thick bush conditions. The pipeline passing north-south across the west of the claim gives good access by four wheel drive vehicle or ATV.

Most of the rock observed was fine to medium fine grained, medium to dark green, variably chloritized mafic volcanics. Although platey shearing was observed at one location, no definite lineaments or foliations were noted. Some carbonatization as mild bleaching was tested to show dilute HCL bubbling but no strong coincident pyrite mineralization was noted. In all 4 samples were submitted for gold analysis. No significant values were shown.

Establishing grid control for more detail mapping along with geophysical and geochemical work such as mobile metal ion or soil geochemistry may show areas of structural or metals anomolies from burried features, narrowing down the target areas.

SAMPLES

20211 - whitish quartz vein material. Refractured appearing healed with a lighter clearer quartz. Odd pytire aggregates of brassy pyrite grains to 2mm, and some fine whitish pyrite. Quartz is rusty stained on fractures and joints.

20212 - reddish medium grained syenitic rock. Somewhat porphyritic? with maybe 5% whitish partly rounded feldspars about 2mm average in size. Odd 1mm cubes and fine grains of pyrite throughout but probably less than 1% ave. Hardness ~knike or harder. Non magnetic. Fine whitish pyrite throughout in sprays and patches.

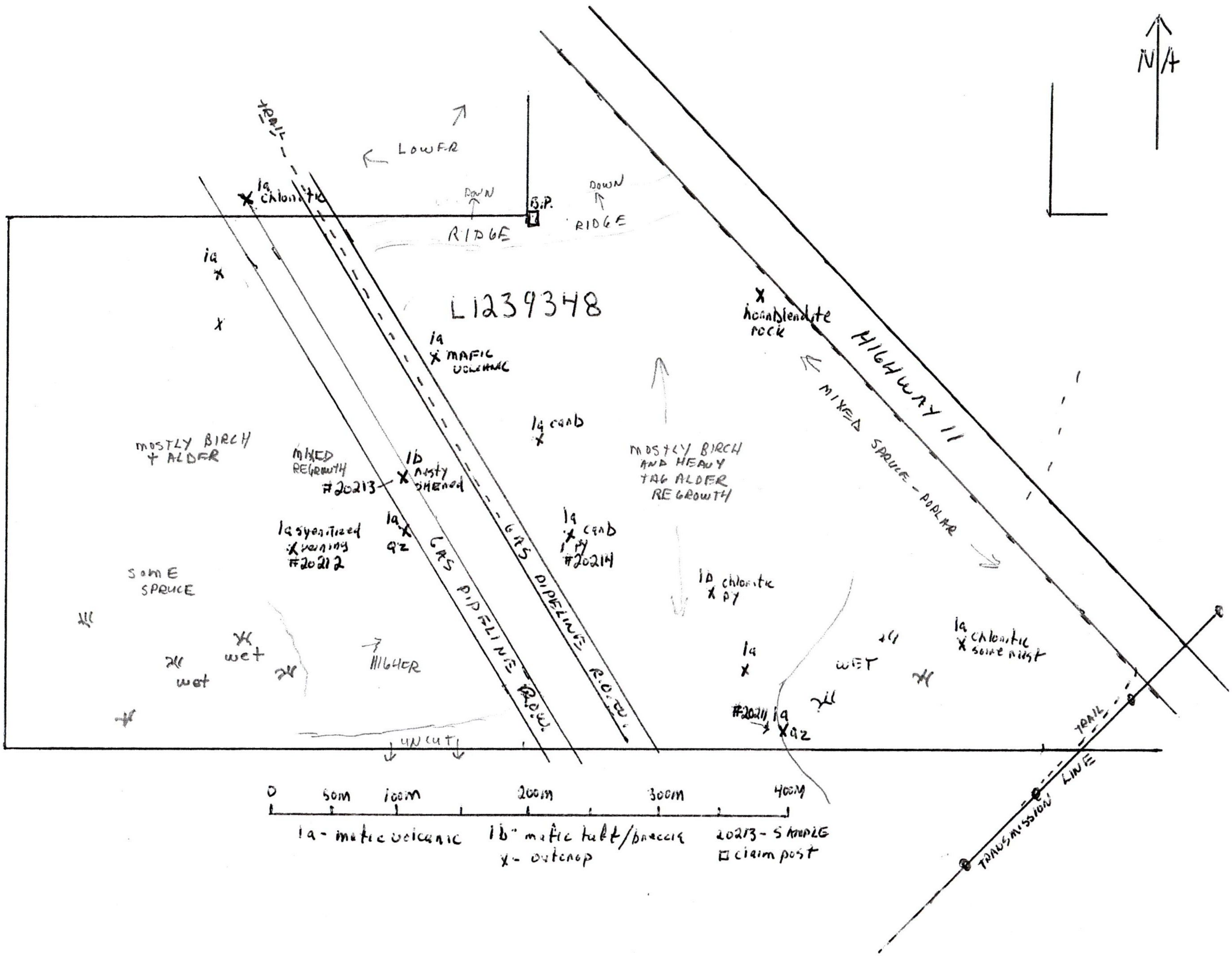

L1239348
N
HIGHWAY 11
LOWER
DOWN
RIDGE
B.P.
TRAIL
1a chlorite
1a mafic volcanic
1a carb
hornblendite rock
MIXED SPRUCE - POPLAR
MOSTLY BIRCH + ALDER
MIXED REGROWTH
1b rusty sheared
#20213
MOSTLY BIRCH AND HEAVY TAG ALDER REGROWTH
1a syenitized veining #20212
1a qz
GAS PIPELINE
GAS PIPELINE R.O.W.
1a carb py #20214
1b chloritic py
SOME SPRUCE
wet
HIGHER
UNCUT
1a chloritic some rust
WET
#20211 1a qz
TRANSMISSION LINE
0 50m 100m 200m 300m 400m
1a - mafic volcanic
1b - mafic tuff/breccia
x - outcrop
20213 - SAMPLE
□ claim post

Fig - 6

20213 - rusty and platey sheared volcanic rock. Pale green to chloritic appearing. Odd fine pyrite and small aggregates. Somewhat waxy appearing shear surfaces. Odd thin wisps of rusty quartz parallel to shearing. Hardness of about common nail to less than knifeblade. Non magnetic.

20214 - medium green, to 1mm grained lightly carbonated mafic volcanic vock. 5mm whitish quartz vein with several perpendicular qz stringers. Several grains and fine cubes of whitish pyrite in vein with brassier color pyrite noted in wall rock. Non Magnetic. Hardness of ~knife blade.

CONCLUSION

As previously outlined, by Guindon et.al., it appears there a continuous zone with a strike length exceeding 2.0 km, generally on strike with the work area. Several deposits in the Kirkland Lake Resident Geologist District such as the Lightning Zone at the Holloway Mine, "flow ore" at the Kerr Mine and the "D" zone at the Cheminis Mine and possibly the "AK" Zone in Kirkland Lake do not come to surface. In the plane and above these orebodies/deposits there is ample evidence at surface for their existence in the form of carbonatization, silicification, pyrite mineralization and minor, sporadic gold mineralization. The gold values obtained along this large mineralized alteration zone is generally low, but occasional assays ranging up to 1851 ppb indicate potential for areas of higher interest. Focused targets for mineralization along this alteration zone should be better defined by an deeper penetrating IP survey measuring to a depth of at least 400 m as suggested by Sharpley (1999).

Further prospecting work targeting accessible surface exposures will of course continue while pursuing financing or an option to perform comprehensive studies.

Established 1928

Swastika Laboratories Ltd

Assaying - Consulting - Representation

Assay Certificate

Certificate Number: 16-1720

Company: **Eric Marion**

Project: The 1

Report Date: 09-Dec-16

Attn: Eric Marion

We hereby certify the following Assay of 4 rock/grab samples submitted 05-Dec-16 by Eric Marion

Sample Number		Au FA-MP ppb
20211	1	< 2
20212	1	< 2
20213	1	< 2
20214	1	< 2

1. No Reject

Certified by

Laurentiu Fulea

1 Cameron Ave., P.O. Box 10, Swastika, Ontario P0K 1T0
Telephone (705) 642-3244 Fax (705) 642-3300

Appendix A

Open File Report 6007
Ontario Geological Survey
Resident Geologist Program
Kirkland Lake Regional Resident Geologist
(Kirkland Lake District) - 1999
by
G. Meyer, G.P.B. Grabowski, D.L. Guindon and M. Charette 2000

KIRKLAND LAKE DISTRICT–1999
Recommendations for Exploration
ALLSOPP-- HUSTON GOLD PROPERTY

.....pg15

The Allsopp--Huston property, consisting of 12 leased mining claims, is located 10 km southwest of Kirkland Lake in Eby and Otto townships. The property has a long history of exploration, dating back to the 1930's, and includes detailed geological mapping, trenching, magnetometer, and IP surveys, diamond drilling and development of a 32 m deep shaft. A major altered deformation zone, consisting of iron carbonate, silicification and pyritization, occurs over a strike length of 1000 m and a width of 200 m on the property along the Eby--Otto fault. This fault is a subsidiary of the Larder Lake Break within Archean tholeiitic metavolcanic rocks. A silicified breccia zone with disseminated pyrite is hosted within the altered deformation zone. The breccia zone has a strike length of 600 m and a width of 50 m. Geochemically anomalous gold values, ranging up to 1851 ppb Au, occur in the breccia zone and the alteration zone. Moderate to strong IP (chargeability) anomalies occur within the alteration zone over a strike length of 800 m and a width of 100 m. The IP anomalies in the alteration zone along the Eby--Otto fault, 1.5 km south of the Larder Break, are attractive targets for further exploration.

The past-producing Swastika Mine, on the Larder Lake Break, is located 4 km northeast of the property. The recently discovered Amalgamated Kirkland deposit, located along a subsidiary fault north of the Larder Lake Fault Zone, is 9 km to the northeast. The nature of several gold deposits in the Kirkland Lake – Larder Lake gold belt is such that they occur at depth within carbonate--altered rocks exhibiting geochemically anomalous gold concentrations at surface. The alteration and anomalous gold values tend to envelop potentially economic gold mineralized zones and continue to surface above "blind", deep--seated gold deposits. The Amalgamated Kirkland deposit is an example and occurs at a depth of 250 m with alteration and anomalous gold values continuing to surface. In view of the experience at the Amalgamated Kirkland, a program of deep IP is warranted to explore at depth the geochemically anomalous gold values associated with extensive Fe--carbonate alteration and silicification at surface.

.....pg16

A two--phase program is recommended. The first phase should consist of line cutting, magnetometer, fill--in and deep IP surveys, trenching, stripping, geological mapping and sampling. The second phase should diamond drill test deep IP anomalies at depth. (Proposal -- courtesy Sharpley 1999, Meyer et. al. 1991 and Kirkland Lake Assessment File No. KL 4110).

Meyer, G., Cosec, M., Grabowski, G.P.B., Guindon, D.L., Chaloux, E.C. and Charette, M. 2000. Report of Activities 1999, Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake and Sudbury Districts; Ontario Geological Survey, Open File Report 6007, 88p.

Appendix B

ONTARIO GEOLOGICAL SURVEY
Open File Report 6184
Report of Activities, 2005
Resident Geologist Program
Kirkland Lake Regional Resident Geologist Report:
Kirkland Lake District
by : G. Meyer, G.P.B. Grabowski, D.L. Guindon and E.C. Chaloux, 2006

PROPERTY EXAMINATIONS

Allsopp Prospect – Former Harrington Prospect.....pg11

The A. Allsopp property is located in the northeast corner of Eby Township, approximately 10 km southwest of Kirkland Lake. The property consists of 12 leased claims, 11 with mining rights only and one with surface and mining rights.

Overburden stripping at location NAD83 Zone 17 562991E / 5325585N **(A**)exposed a chalcopyrite vein system up to 1 m wide. At the southern contact of this vein system, chalcopyrite is locally concentrated in a band up to 10 cm wide that grades up to 12.13% Cu (A. Allsopp, personal communication, 2005). The mineralized zone strikes 060°, has a near vertical dip and is hosted within carbonatized mafic volcanic rock that is exposed over a 25 m width. Chalcopyrite is also exposed in another overburden-stripped area to the east at NAD83 Zone 17 563080E / 5325607N (**B**). A syenite intrusion is exposed at the northern side of both stripped areas. The overburden stripping was intended to follow up on high-grade drill intersections that Todora Syndicate reported in 1948 (Huston 2000). Nothing at surface appears to support the reported drill results, and it was already suggested by N.E. Nelson in 1948 that the drill results were likely fraudulent (Huston 2000). This issue has perhaps overshadowed the potential that may exist along strike and at depth of a major alteration zone with associated IP anomalies along the Eby–Otto fault, both on the property and to the west of it. This fault zone is located 1.5 km south of the Cadillac–Larder Lake deformation zone.

Sharpley (1999) describes the mineralization and alteration on the property as follows:

"A major zone consisting of iron carbonate, silicification and pyritization occurs over a strike length of 1000 m and a width of 200 m on the Allsopp-Huston Property along the Eby-Otto fault, which is a subsidiary of the Cadillac-Larder Lake Break within the Larder Lake Group of tholeiitic volcanics. A zone of silicified breccia occurs within the envelop of alteration with disseminated pyrite over a strike length of 600 m and over a width of 50 m. Geochemically anomalous values occur in and around the alteration zone ranging up to 1851 ppb (Au). Moderate to strong induced polarization (chargeability) anomalies occur within the alteration zone over a strike length of 800 m and a width of 100 m".

Silicified, carbonatized and chloritized rock, probably altered mafic volcanic rock, occurs on the access road to the overburden stripped areas at NAD83 Zone 17 562856E / 5325623N(**C**). The rock has undergone micro-fracturing with specularite? fracture filling and contains up to 15% pyrite. This rock unit is perhaps similar to the silicified breccia described by Sharpley (1999). A similar rock also occurs, probably on strike, 1.45 km to the west-northwest in an outcrop on the western side of Hwy 11 at approximately NAD83 Zone 17 561455E / 5325782N (**D**). If the mineralized and hydrothermally altered sites are part of a continuous zone then the strike length could exceed more than 2.0 km. Although the gold content associated with this large mineralized alteration zone is generally low, sporadic gold values ranging up to 1851 ppb make it a very attractive target for further exploration. A number of gold deposits in the Kirkland Lake Resident Geologist District such as the Lightning Zone at the Holloway Mine, "flow ore" at the Kerr Mine and the "D" zone at the Cheminis Mine do not come to surface. In the plane and above these orebodies/deposits there is ample evidence at surface for their existence in the form of carbonatization, silicification, pyrite mineralization and minor, sporadic gold mineralization. The best potential for mineralization along this alteration zone should be determined by an IP survey measuring to a depth of 400 m as suggested by Sharpley (1999). Deep drilling should then follow up on the most favourable IP defined targets to ultimately test to a depth of 400 m below surface and possibly beyond.

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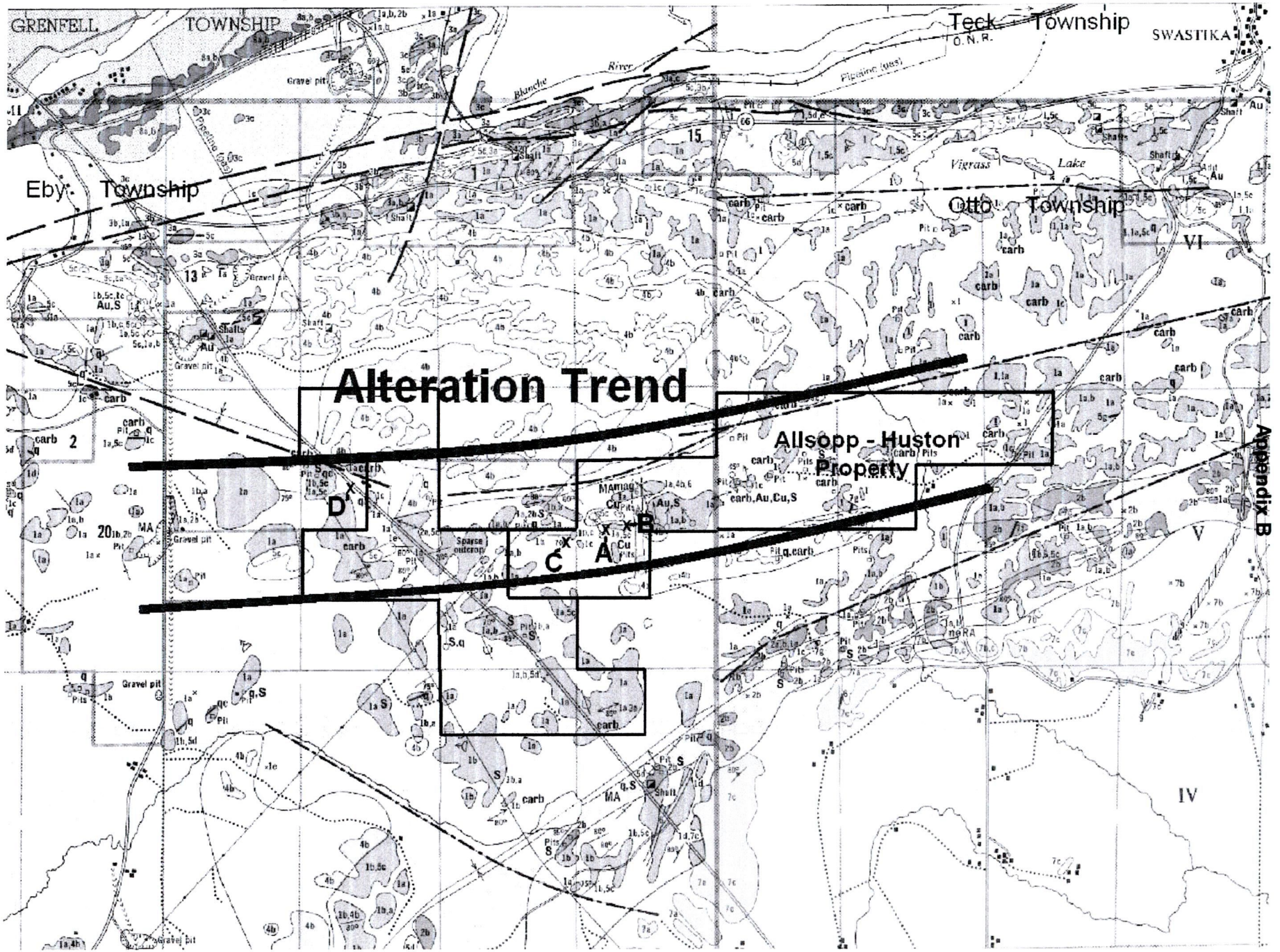
Meyer, G., Grabowski, G.P.B., Guindon, D.L. and Chaloux, E.C.
2006. Report of Activities 2005, Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake District; Ontario Geological Survey, Open File Report 6184, 50p, page 11-"Allsopp Prospect – Former Harrington Prospect"



sites keyed to OGS, OFR 6184 Report of Activities 2005, Resident Geologist Program Allsopp Prospect pg11

Bibliography

Barnes, S.J., Gorton, M.P. and Naldrett, A.J.
1981:Platinum Group Elements in Abitibi Komatiites Associated with Nickle Sulfide Deposits; in Geoscience Research Grant Program, Summary of Research, 1980 to 1981, Ontario Geological Survey,Miscellaneous Paper 98, Grant 17, p. 1-12

Crocket, J.H. and Bowins, R.J.
1985:Rare Earth Element Properties of Archean Iron Formations and their Host Rocks- Some Results from the Temagami and Boston Iron Formations; in Geoscience Research Grant Program, Summary of Research 1984 to 1985, Ontario Geological Survey, Miscellaneous Paper 127, Grant 132, p. 10-14

Crocket,J.H., Blum,N., Hurley, R.,Bowins,R., McRoberts,G., Fyon,A., McNutt,R.H., Schwarcz,H.P. and Rees, C.E.
1984:Geological and Geochemical Studies of the Boston and Temagami Iron Formations and their Contiguous Volcanosedimentary Piles; in Geoscience Research Grant Program, Summary of Research, 1983 to 1984,Ontario Geological Survey, Miscellaneous Paper 121, Grant 132, p. 72-83

Crocket,J.H., Blum,N., Hurley, R.,Bowins,R., McRoberts,G., Fyon,A., McNutt,R.H., Schwarcz,H.P. and Rees, C.E.
1983:Isotopic and Geochemical Characterization of Archean Iron Formations and Associated Volcanic Rocks-Some Preliminary Results from the Temagami and Boston Iron Formations; in Geoscience Research Grant Program, Summary of Research, 1982 to 1983,Ontario Geological Survey,Miscellaneous Paper 113, Grant 132,p.29-40

Fyon,J.A., Crocket, J.H., Schwarcz, H.P., Kabir, A., and Knyf, M.
1981: Trace Element and Stable Isotope Geochesistry of Auriferous Iron Formations in the Timmins Area; in Geoscience Research Grant Program, Summary of Research, 1980 to 1981, Ontario Geological Survey Miscellaneous Paper 98, Grant 49, p. 90-107

Fortescue, J.A.C. and Gleeson, C.F.
1984: An introduction to the Kirkland Lake (KLIP) Basil Till Geochemical and Mineralogical Study (1979-1982), Timiskaming District, Ontario Geological Survey, Map 80 714, Geochemical Series, Compiled 1984

Hicks,K.D.,and Hattori, K.
1988:Magmatic-Hydrothermal and Wall Rock Alteration Petrology at the Lake Shore Gold Deposit,Kirkland Lake, Ontario; in Geoscience Research Grant Program, Summary of Research 1987 to 1988, Ontario Geological Survey, Miscellaneous Paper 140,Grant 313, p.192-204

Hattori, Keiko, and Levesque, G.
1989: Hydrothermal Activity in the Kirkland Lake Intrusive Complex,Temiskaming District, Ontario, Geoscience Research Grant Program, Summary of Research 1988 to1989, OGS, Miscellaneous Paper 143, Grant 313, p. 59-67

Jensen, L.S. and Langford, F.F
1983:Geology and Petrogenesis of the Archean Abitibi Belt in the Kirkland Lake Area, O.G.S. Open File Report 5455

Lafleur, Pierre Jean
1986: The Archaen Round Lake Batholith, Abitibi Greenstone Belt, A Synthesis, Thesis submitted in partial fulfillment for Masters in Geology, isbn 0-315-33340-5

Lovell, H.L.
1972: Geology of the Eby and Otto Area, District of Temiskaming, Ontario Department of Minesand Northern Affairs, Geological Report 99, Accompanied by Map 2239, scale 1 inch to 1/2 mile

Lovell, H.L. and Caine, T.W.
1970: Lake Temiskaming Rift Valley; Ontario Department of Mines, Miscellaneous Paper 39

Meyer, G., Cosec, M., Grabowski, G.P.B., Guindon, D.L., Chaloux, E.C. and Charette, M. 2000. Report of Activities 1999, Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake and Sudbury Districts; Ontario Geological Survey, Open File Report 6007, 88p

Meyer, G., Grabowski, G.P.B., Guindon, D.L. and Chaloux, E.C. 2006. Report of Activities 2005, Resident Geologist Program, Kirkland Lake Regional Resident Geologist Report: Kirkland Lake District; OGS, Open File Report 6184, 50p, page 11 -"Allsopp Prospect – Former Harrington Prospect"

Moore, J.C.G. 1966: Geology of Burt Holmes Area,District of Temiskaming,Ontario Department of Mines Geological Report 44, Accompanied by Map2078, scale 1 inch to 1/2 mile

O.G.S. 1979:Airbourne Electromagnetic and Total Intensity Magnetic Survey, Kirkland Lake Area, Morrisette Township, District of Temiskaming : by Questor Surveys Limited for the Ontario Geological Survey, Prelim.Map P.2258 Geophys. Ser., Scale 1:20,000, Survey and compilation February and March 1979

O.G.S. 1979:Airbourne Electromagnetic and Total Intensity Magnetic Survey, Kirkland Lake Area, Teck Township, District of Temiskaming : by Questor Surveys Limited for the Ontario Geological Survey, Prelim.Map P.2263A North Half, and 2263B South Half, Geophys. Ser., Scale 1:20,000, Survey and compilation February and March 1979

O.G.S. 1986: Volcanology and Mineral Deposits, Miscellaneous Paper 129

O.G.S. 1972: Geological Compilation Series, Map 2205, Timmins - Kirkland Lake area, compiled by D.R. Pyke, L. D. Ayres, and D.G. Innes

Ontario Geological Survey . 2004: Airborne magnetic survey,residual magnetic field and Keating coefficients, Kirkland Lake – Larder Lake area; OGS, Map 81 938, scale 1:20 000.

Ontario Geological Survey . 2000: Airborne magnetic and electromagneticsurveys, apparant conductance and electromagnetic anomolies, Kirkland Lake – Larder Lake area; Ontario Geological Survey, Map 82 050, scale 1:50 000.

Ontario Geological Survey . 2000: Airborne magnetic and electromagneticsurveys, residual magnetic field and electromagnetic anomolies, Kirkland Lake – Larder Lake area; Ontario Geological Survey, Map 82 221, scale 1:50 000.

Powell, W.G., Hodgson, C.J., and Hanes, J.A. 1989:The Expression of the Larder Lake Break in the Matachewan Area, Temiskaming District,Ontario; in Geoscience Research Grant Program, Summary of Research 1988 to 1989,Ontario Geological Survey, Miscellaneous Paper 143, Grant 329, p. 125-132

Savage, W.S. 1964:Mineral Resources and Mining Properties in the Kirkland Lake - Larder Lake Area, District of Temiskaming, Ontario Department of Mines Mineral Resource Circular No. 3, with Chart "A" Kirkland-Larder Lake Area, scale 1 inch to 2 miles

Toogood, D.J. and Hodgson, C.J. 1986: Relationship Between Gold Deposits and the Tectonic Framework of the Abitibi Greenstone Belt in the Kirkland Lake-Larder Lake Area; in Geoscience Research Grant Program, Summary of Research 1985 to 1986,Ontario Geological Survey, Miscellaneous Paper 130,Grant 227, p.79-86

Thomsom Jas. E., 1944: Ontario Department of Mines, Map No. 1946-1, Kenogami Lake Area, District of Temiskaming, scale 1 inch to 1,000 feet, geology by Wm Gerrie et.al. 1939, additional geology by Thomson et.al., 1944

Ministry of Northern Developement and Mines Resident Geologist Files, literally scores of files of submitted assesment work files covering many claims in Eby, Grenfell, Otto, Lebel, Morrisette and Teck Township.